

The voltmeter should read battery voltage. If the voltmeter reading is incorrect, perform the *Continuity Test* in this section.

6. Turn the ignition switch off.

7. Reverse Steps 1-3 to complete installation.

Continuity Test

1. Remove the starter relay switch as described in this chapter.
2. Connect an ohmmeter to the starter relay switch battery and starter terminals (**Figure 41**).
3. Momentarily connect a 12-volt battery to the starter relay switch terminals as shown in **Figure 41** while reading the resistance on the ohmmeter.
4. The ohmmeter should show continuity when battery voltage is applied and no continuity when the battery voltage is removed.
5. If either reading is incorrect, replace the starter relay switch and retest.

Removal/Installation

1. Remove the seat (Chapter Fifteen), then remove the lid above the battery.
2. Disconnect the negative battery cable from the battery (Chapter Three).
3. Disconnect the starter relay connector (B, **Figure 40**).
4. Slide the two covers away from the terminals on top of the starter relay switch.
5. Disconnect the battery and starter cables from the starter relay switch (**Figure 42**).
6. Remove the starter relay switch and its rubber mount from the frame.
7. Install the starter relay switch by reversing the preceding removal procedures.

DIODE

A diode is installed in the starting circuit. See the wiring diagrams at back of this manual.

Removal/Testing/Installation

1. Remove the seat (Chapter Fifteen), then remove the lid above the battery.
2. Remove the fuse box cover (**Figure 43**).
3. Pull out the diode (**Figure 44**).

4. Test the diode as follows:
 - a. Set an ohmmeter to the $R \times 1$ scale.
 - b. Check for continuity between the middle terminal on the diode (A, **Figure 45**) and one of the end terminals (B). Reverse the ohmmeter leads and recheck for continuity between the same terminals. The ohmmeter should read continuity during one test and no continuity (infinite resistance) with the leads reversed.
 - c. Repeat substep b by checking for continuity between the middle terminal and the remaining end terminal.
 - d. Replace the diode if it fails the continuity tests.
5. Reverse Steps 1-3 to install the diode.

ELECTRIC SHIFT SYSTEM

FE and TE models are equipped with the electric shift system. The shift components are controlled by the electronic control unit (ECU). Input from switches and sensors prompts the ECU to operate the shift control motor, which drives a set of reduction gears to actuate the transmission shift components and the clutch. Refer to **Figure 46**.

Operation

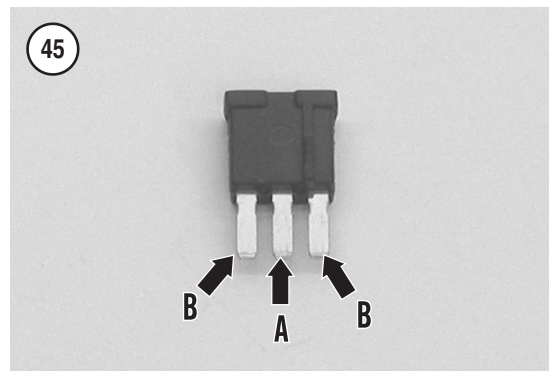
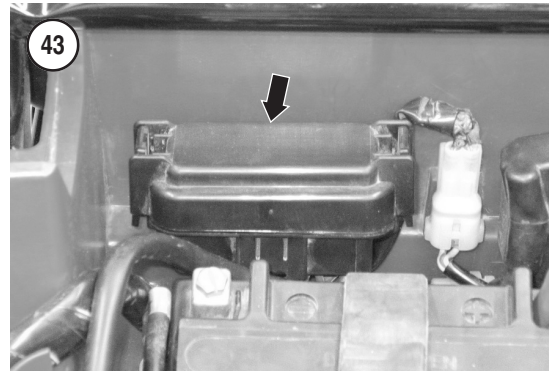
The shift control motor (**Figure 47**) may rotate in either direction. Rotation transfers through the gear reduction assembly to the gearshift spindle. The gearshift spindle controls the transmission and change clutch similar to manually shifted models. When the control motor rotates, the gearshift spindle rotates thereby disengaging the change clutch and shifting gears.

The angle sensor converts gearshift spindle motion into electrical signals that are sent to the ECU.

The computer portion of the ECU converts the input signals from the switches and sensors into directional signals for the motor circuit, which powers the control motor. The ECU also contains a self-diagnostic circuit that stops operation of the electronic shift system if it detects an error.

NOTE

If the electronic shift system malfunctions, turn off the ignition switch, wait a short time, then turn it back on. If the electronic shift system malfunc-



tion remains, refer to Chapter Two and follow the troubleshooting procedure.

The gearshift switches on the left handlebar assembly (A, **Figure 48**) send shift up or shift down signals to the ECU. The reverse shift button (B, **Figure 48**) engages the reverse shift cable when the rear brake lever is pulled. The reverse cable actuates the internal reverse arm, which operates the reverse switch on the rear crankcase cover. The reverse switch informs the ECU that the control motor may

Copyright of Honda TRX350 RANCHER, 2000-2006 is the property of Penton Media, Inc. ("Clymer") and its content may not be copied or emailed to multiple sites or posted to a listserv without the copyright holder's express written permission. However, users may print, download, or email articles for individual use.